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WHAT IS CLAIMED IS:

1. A device for mixing a bone filling material comprising:

a receptacle for receiving components of the bone filling material in an unmixed condition;

5 a mixing element insertable into the receptacle to mix the components;

an actuator for the mixing element including a drive member and a driven member coupled to the drive member and removably coupled to the mixing element.

2. A device as in claim 1, wherein the mixing element comprises a paddle that mixes the components in response to rotation.

3. A device as in claim 2, wherein the drive member rotates the paddle.

4. A device as in claim 1, wherein the mixing element includes structure to promote mixing of the components.

5. A device as in claim 4, wherein the structure comprises a plurality of apertures.

6. A device as in claim 1, further comprising:

5 a plunger insertable into the receptacle after removal of the mixing element to dispense filling material from the receptacle.

7. A device as in claim 1, further comprising a stand to hold the receptacle.

8. A device as in claim 1, further comprising a dispenser attachable to the receptacle to dispense the filling material.

9. A device as in claim 8, wherein the dispenser comprises a nozzle.

10. A device as in claim 8, the dispenser comprising a fitting incorporated in a distal tip of the receptacle.

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11. A device as in claim 8, the dispenser comprising a tube incorporated in a distal tip of the receptacle.

12. A device as in claim 1, wherein the actuator includes a drive train that couples a drive member to a driven member.

13. A device as in claim 12, the drive train comprising a planetary gear system.

14. A device as in claim 1, wherein the actuator includes linkage imparting rotation of the drive member to the driven member.

15. A device as in claim 1, wherein the drive member is operable manually.